

Cold Water and Ice Rescues

by Deputy Chief Raymond M. Downey, SOC

The FDNY is accustomed to responding to many kinds of unusual incidents on a daily basis. Cold water/ice rescues are among the most uncommon, difficult and dangerous responses required by FDNY personnel. Preplanning and proper equipment will ensure the safest outcome for members involved in these kinds of incidents.

The Department is equipping 36 units with cold water rescue suits and other related equipment for responses to cold water and ice rescue incidents. It is not difficult for the untrained, inexperienced, potential rescuer to become a victim.

Frequently, Murphy's law comes into play when one of these incidents occurs. Just as frequently, the unit that doesn't have all the equipment necessary for safe and successful cold water/ice rescue will be the one to respond initially. This underscores why it is extremely important that *all* members of the Department be familiar with operations at cold water/ice rescue incidents.

It is paramount to remember: *No ice is safe ice.* When an

alarm is received reporting a victim who has fallen through the ice, a rescuer's "bells and lights" should go off. If a victim has fallen through the ice, the ice must be unsafe. Rescuers must treat the ice on which they will be working as dangerous and capable of breaking at any time and any location.

So how does a rescuer approach or reach a victim who has fallen through the ice? First, rescuers must remember, no ice is safe ice. A team response with all the necessary proper protective equipment is the ideal situation. A member wearing a cold water rescue suit should be tethered (safety line attached), with a member on shore tending the safety line. When necessary, if sufficient equipment and staffing are available, two teams could be used.

Generally, there are three methods used for cold water/ice victim rescue:

1. **Reach.**
2. **Throw.**
3. **Go.**

The *Reach* method can be used when a victim is conscious. With this method, the rescuer uses a stick, pole, hook, ladder or other device and extends it out to the victim. Rescue methods can be highly ingenious, with much improvisation employed at these incidents.

A word of caution when using any object that may be non-buoyant or metal: A non-buoyant object may weaken or destroy the ice supporting the victim. Metal objects are highly heat-conductive. Metal will steal heat from victims and rescuers alike. A victim may find his hands completely useless after grasping a metal object. Sometimes, there are no other options, necessitating the use of a non-buoyant or metal object. When the victim has gained a hold on the object, rescuers then can pull the victim from the hole.

When the *Reach* method can't be used, the *Throw* method can be effective. Using a throw rope, the rescuer throws the rope to the victim. When possible, the victim should secure the rope around his body to be pulled to the shore. If the victim is unable to secure the rope around



(Above) Firefighter demonstrates the *Reach* method of rescue. He is extending a hook to the victim, who then will be pulled or dragged from the hole.

himself, he should get a good hand grip on the rope, so the rescuers can pull him to shore.

The *Go* method is used when the victim can't hold onto a pole, hook, rope or other object. Most likely, victims exposed to cold water for any extended period of time will have problems with their manual dexterity and motor skills. During the *Go* method, rescuers must be properly protected and tethered and preferably wearing a cold water rescue suit. A floatation device frequently proves useful during these kinds of rescues.

Approach the victim with caution. Victims most likely will be extremely anxious, panicky and struggling. It's quite likely that the victim would try to grab a rescuer if the rescuer is too close. This could result in a life and death struggle. Actually, this is true of all kinds of water rescues.

When possible, approach the victim from the side, while reassuring him/her. Victim removal may be difficult and/or require the assistance of the victim when possible. Once the victim has been removed from the water, he/she will be pulled back to shore along with the rescuer.

Minimum personnel should be on the ice. Additional personnel on the shore is beneficial, helping remove the victim back to the shore. Bunker gear should *not* be worn during any rescue attempt. Safety Bulletin #81 describes waterfront operations while wearing bunker gear.

A standby rescuer should be properly dressed with a cold water suit, prepared to assist the first rescuer if he gets into trouble. All operating personnel should have personal floatation devices and rescuers always must be on a safety line tended by a member on the shore. Remember, the safety of the rescuer is paramount. *No ice is safe ice!*

Editor's Note: For more information regarding cold water and ice rescues, see "Cold Water Emergencies," by Deputy Assistant Chief Ronald R. Spadafora on page 6 of this issue and "Jerome Park Reservoir Operation," by Battalion Chief Michael A. Telesca, and "Near-Drowning: Cold-Water Resuscitation," by Drs. Kerry Kelly, David Prezant and Neal Richmond in the 3rd/2001 issue of WNYF.



(Left) The least favorable method is for the rescuer to actually enter the water with the victim. Sometimes, however, it is unavoidable. Extreme caution must be used, again, so that the rescuer does not become a victim.



(Above) Employing the *Throw* method, a Firefighter tosses rope to the victim and then hauls him/her to safety. Ideally, the victim will be able to secure the rope around his/her body.



(Above) With the *Go* method, the Firefighter—safely and securely tethered—moves out on the ice because the victim is unable to hold onto an object to assist in his own rescue. The key is for the rescuer to approach with caution so that he does not become a victim, too.

About the Author...

Deputy Chief Raymond M. Downey was a 39-year veteran with the FDNY and headed up the Special Operations Command until his untimely death at the World Trade Center on September 11, 2001. He was a regular contributor to WNYF, a Contributing Editor for Fire Engineering, the author of The Rescue Company and a frequently requested speaker and instructor throughout the country. He held an AAS degree in Fire Science.

